

**Listing of Claims:**

This listing of claims is provided for the Examiner's convenience.

1. (Currently amended) A magnetic random access memory device comprising:  
a plurality of magnetic memory elements; ~~and~~

a sense line coupled to the plurality of magnetic memory elements for sensing a magnetic orientation of at least one of the plurality of magnetic memory elements, the sense line including a first via and a second via;

wherein the sense line is utilized to thermally assist in switching a magnetic orientation of the at least one of the plurality of magnetic memory elements by providing a current from the first via to the second via; and

a current source coupled to the sense line wherein the current source provides the current from the first via to the second via.

2. (Original) The device of claim 1 wherein each of the plurality of magnetic memory elements comprises a spin dependent tunnel junctions.

3. (Original) The device of claim 1 wherein each of the plurality of magnetic memory elements comprises a giant magnetoresistive device.

4. (Original) The device of claim 1 wherein the sense line comprises semiconductor material.

5. (Original) The device of claim 1 wherein each of the plurality of magnetic memory elements further comprises at least one write conductor.

6. (Original) The device of claim 1 wherein each of the plurality of magnetic memory elements includes a free layer and switching a magnetic orientation of at least one of the plurality of magnetic memory elements comprises switching a magnetic orientation of the free layer.

7. (Canceled).

8. (Original) The device of claim 4 wherein the semiconductor material comprises at least one of Pt, SiC, Si or C material.

9. (Previously presented) The device of claim 5 wherein the at least one write conductor comprises two write conductors wherein the two write conductors are utilized to switch the magnetic orientation of the at least one of the plurality of magnetic memory elements.

10. (Previously presented) The device of claim 5 wherein the at least one write conductor comprises only one write conductor wherein the only one write conductor is utilized to switch the magnetic orientation of the at least one of the plurality of magnetic memory elements.

11. (Withdrawn) The device of claim 6 wherein the sense line is above the free layer.

12. (Withdrawn) The device of claim 6 wherein the sense line is below the free layer.

13. (Previously Presented) The device of 10 wherein the only one write conductor is positioned orthogonal to the sense line.

14-29. (Canceled)